

## CLAIMS

What is claimed is:

1. A medical data base supervisory control system comprising:

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- (a) at least one data base including medical data individually relating to each of a plurality of patients,
- (b) internet and/or intranet means for requesting and accessing said medical data,
- (c) means for identifying medical data for each of said patients with conditions required for accessing of said medical data, and
- 10 (d) data processing means for comparing said request with said conditions required for access of said data and, when said request fails to comply

2. A system of Claim 1 further including means for authenticating the identity of the requesting party.

15 3. The system of Claim 2 further including means to prevent ~~access to~~ requests for information concerning medical records by any party without the prior authorization of the patient about whom such records pertain.

4. The system of Claim 1 further including means for tentatively identifying records fulfilling the criteria specified in said request for medical

20 data.

5. The system of Claim 4 further including means for authenticating the identity of the patient.

*Sub B2* ~~the~~ *said patients / said patients*

6. The system of Claim 1 wherein said means for requesting said

medical data includes means for indicating what part of said records is desired.

5 7. The system of Claim 1 wherein said means for requesting access to said medical records includes means for indicating the reason said records are being requested.

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a B 8. The system of Claim 1 <sup>further</sup> including means for identifying records fulfilling <sup>said</sup> such request <sup>with</sup> include data symbolic of ~~the~~ patient identity.

10 B 9. The system of Claim 8 wherein said means for identifying records fulfilling <sup>said</sup> such request further include data symbolic of medical symptoms or reason for patient visit.

B 10. The system of Claim 8 wherein said means for identifying records fulfilling <sup>said</sup> such request further include data symbolic of types of diagnostic tests performed.

15 B 11. The system of Claim 10 wherein said means for identifying records fulfilling <sup>said</sup> such request further include data symbolic of the attributes, levels or findings indicated within said diagnostic tests.

B 12. The system of Claim 8 wherein said means for identifying records fulfilling <sup>said</sup> such request further include data symbolic of modes of treatment or medical services rendered.

20 B 13. The system of Claim 8 wherein said means used for identifying records fulfilling <sup>said</sup> such request further include data symbolic of any ancillary services rendered.

14. The system of Claim 8 wherein said means used for identifying

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records fulfilling <sup>said</sup> such request further include data symbolic of attending physician identity.

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15. The system of Claim 8 wherein said means for identifying records fulfilling <sup>said</sup> such request further include data symbolic of date of care.

16. The system of Claim 1 wherein said means for requesting and accessing said medical data includes means for indicating a "standing order" that will automatically initiate an attempt to retrieve certain pre-determined types of medical data under specific pre-specified circumstances.

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17. The system of Claim 1 wherein said conditions required for accessing said medical data includes an indication of the names of each of the parties who's permission must be obtained prior to the release of ~~the~~ such medical data.

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18. The system of Claim 17 wherein said conditions required for accessing said medical data further includes an indication of the charge that will be assessed by the holder of such medical data for the part, or in the form, specified by the requesting party.

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19. The system of Claim 17 wherein said conditions for accessing said medical data includes means indicating the time following the receipt of all approvals that will be required for the delivery of such medical data to the requesting party.

20. The system of Claim 1 wherein said at least one data base

includes a firewall limiting access to searching such data base solely to those parties who are authorized to do so.

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21. The system of Claim 1 wherein said means for identifying medical data fulfilling the criteria specified in a request include a means for producing an indicia of the degree to which data listed in such data index match the criteria specified in such request.

22. The system of Claim 1 including means for a party to grant permission to the release of such medical.

23. The system of Claim 22 wherein said at least one data base includes a billing means for access to said medical data.

24. The system of Claim 22 wherein said means to grant permission includes data symbolic of the identity of such party and data symbolic of the preferred means for contacting such party to request access to and release of said patient's medical data.

25. The system of Claim 23 wherein said means for a party to grant permission includes data symbolic of rules to be followed in the event time elapses before such permission is granted in the case of pre-determined types of requests for such medical data.

26. The system of Claim 1 further including means for identifying the party requesting access to such medical data.

27. The system of Claim 26 further including means for authenticating the identity of each party with such right of approval to the release of such medical data.

28. The system of Claim 27 further including means for producing an indicia that all required approvals for the release of such medical data have been secured.

29. The system of Claim 28 further including means for producing an indicia of the required approvals for the release of such medical data that have not been secured, or that have been specifically declined.

30. The system of Claim 20 further including means for physically disconnecting said at least one data base from data index means, the transmission means to online memory cache means and all other outside parties except during the batch process of uploading pre-designated and fully-approved requests for medical data.

31. The system of Claim 30 further including interface engine means enabling a search agent means to index said at least one data base of medical data.

32. The system of Claim 1 further including means for billing said requesting party for <sup>a</sup>the charge related to access to the medical data.

33. The system of Claim 1 further including means for delivering medical data to a requesting party including means for transmitting medical data held in digital form to an online memory cache means.

34. The system of Claim 33 wherein said online memory cache includes a firewall limiting access to said memory cache exclusively to authorized users.

35. The system of Claim 33 further including means for producing

an indicia that the requested medical data have been received in an online memory cache means and are being held there for download by the requesting party.

36. The system of Claim 34 further including means for the requesting party to enter through the firewall and download said medical data from memory cache means.

37. The system of Claim 1 including means for delivering medical data to the requesting party.

38. The system of Claim 37 further including means for informing the requesting party when medical data is in a non-digital form and the mode of such delivery.

39. The system of Claim 1 further including means for encrypting all communications within the system.

40. The system of Claim 1 further including security log means for retaining an audit trail with regard to all of the communications within the system.

41. The system of Claim 1 further comprising means for allowing parties to advertise in the public portions of said system.

42. A method of controlling access to medical data in a medical data base comprising:

- (a) maintaining at least one data base including medical data individually relating to each of a plurality of patients,
- (b) identifying medical data for each of said patients with

indicia indicative of conditions required for access of said medical data,

(c) selectively introducing internet and/or intranet requests for access to said data, and

(d) comparing said requests with said conditions; and,  
5 when said requests fails to comply with said conditions, automatically denying access to said data.

43. The method of Claim 42 further includes the step of authenticating the identity of the requesting party.

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10 44. The method of Claim 43 further includes the step of <sup>rejecting</sup>~~preventing~~ requests for information concerning medical records by any party without the prior authorization of the patient about whom such records pertain.

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15 45. The method of Claim 42 further including the step of tentatively identifying records fulfilling the criteria specified in said <sup>requests</sup>~~request~~ for medical data.

*Auth Blk*  
20 46. The method of Claim 45 further including the step of authenticating the identity of the patient.

47. The method of Claim 42 wherein said step of requesting said medical data includes the step of indicating what part of the records is desired by the requesting party.

20 48. The method of Claim 42 wherein said step of requesting access to said medical records includes the step of indicating the reason said records are being requested.

49. The method of Claim 42 including the step of identifying

records fulfilling such request include data symbolic of the patient identity.

50. The method of Claim 49 wherein said step of identifying  
B records fulfilling <sup>said requests</sup> ~~such request~~ further include data symbolic of medical  
symptoms or reason for patient visit.

5 51. The method of Claim 49 wherein said step of identifying  
B records fulfilling <sup>said request</sup> ~~such request~~ further include data symbolic of types of  
diagnostic tests performed.

10 52. The method of Claim 51 wherein said step of identifying  
B records fulfilling <sup>said requests</sup> ~~such request~~ further include data symbolic of the  
attributes, levels or findings indicated within said diagnostic tests.

15 53. The method of Claim 49 wherein said step of identifying  
B records fulfilling <sup>said requests</sup> ~~such request~~ further include data symbolic of modes of  
treatment or medical services rendered.

20 54. The method of Claim 49 wherein said step of identifying  
B records fulfilling <sup>said requests</sup> ~~such request~~ further include data symbolic of the ancillary  
services rendered.

25 55. The method of Claim 49 wherein said step of identifying  
B records fulfilling <sup>said requests</sup> ~~such request~~ further include data symbolic of attending  
physician identity.

30 56. The method of Claim 49 wherein said step of identifying  
B records fulfilling <sup>said requests</sup> ~~such request~~ further include data symbolic of date of  
care.

35 57. The method of Claim 42 wherein said step of requesting and



accessing said medical data includes the step of indicating a "standing order" that will automatically initiate an attempt to retrieve certain pre-determined types of medical data under specific pre-specified circumstances.

5 58. The method of Claim 42 wherein said conditions required for accessing said medical data includes the step of indicating the names of each of the parties who's permission must be obtained prior to the release of such medical data.

10 B 59. The method of Claim 58 wherein said conditions required for accessing said medical data includes an indication of the charge that will be assessed by the holder of such medical data for the part, or in the form, specified by the requesting party.

15 B 60. The method of Claim 58 wherein said conditions for accessing said medical data includes <sup>a</sup>the step of indicating the time following the receipt of all approvals that will be required for the delivery of such medical data to the requesting party.

61. The method of Claim 42 wherein maintaining said at least one data base includes maintaining a firewall limiting access to searching said data base solely to those parties who are authorized to do so.

20 Sub B 62. The method of Claim 42 wherein said step for identifying medical data fulfilling the criteria specified in a request includes the step of producing an indicia of the degree to which data listed in such data index match the criteria specified in such request.

63. The method of Claim 42 including the step of providing for a party to grant its permission to the release of such medical data.

64. The method of Claim 63 wherein said step of identifying medical data includes <sup>a</sup>the step of billing for access to said medical data.

5 *B* *Sub* *B9* 65. The method of Claim 63 wherein said step of providing for a party to grant permission includes data symbolic of the identity of such party and data symbolic of the preferred means for contacting such party to request access to and to the release of said patient's medical data.

10 66. The method of Claim 64 wherein said step of providing for a party to grant permission includes data symbolic of rules to be followed in the event time elapses before such permission is granted in the case of pre-determined types of requests for such medical data.

15 67. The method of Claim 42 further including the step of identifying the party requesting access to such medical data.

68. The method of Claim 67 further including the step of authenticating the identity of each party with such right of approval to the release of such medical data.

20 69. The method of Claim 68 further including the step of producing an indicia that all required approvals for the release of such medical data have been secured.

70. The method of Claim 69 further including the step of producing an indicia of the required approvals for the release of such medical data that have not been secured, or that have been specifically declined.

71. The method of Claim 61 further including the step of physically disconnecting said at least one data base from data index means, the transmission means to online memory cache means and all other outside parties except during the batch process of uploading pre-designated and fully-approved requests for medical data.

72. The method of Claim 71 further including the step of providing an interface engine making it possible for a search agent means to index said at least one data base of medical data.

73. The method of Claim 42 further including the step of billing the requesting party for the charge related to delivery of the medical data.

74. The method of Claim 42 further including the step of delivering medical data to the requesting party includes the step of transmitting records held in digital form to an online memory cache.

75. The method of Claim 72 wherein said online memory cache includes a firewall limiting access to said memory cache exclusively to authorized users.

76. The method of Claim 72 further including the step of producing an indicia that the requested medical data have been received in an online memory cache and are being held there for download by the requesting party.

77. The method of Claim 76 further including the step of permitting a properly credentialed requesting party to enter through the firewall and download said medical data from the memory cache.

